DOCUMENT RESUME

ED 228 961 HE 016 131

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TITLE Resource Management for the 80's. (Gloom and Doom in Academia or How to Live Underwater).
PUB DATE Mar 82
NOTE 28p.; Vice Presidential Address presented at the Annual Meeting of the American Educational Research Association (New York, NY, March 1982).
PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Employment Opportunities; *Employment Statistics; Futures (of Society); Higher Education; Human Resources; Information Needs; Labor Market; *Long Range Planning; Models; *Occupational Surveys; Prediction; *Psychologists; Researchers; Retrenchment; *Teacher Supply and Demand

ABSTRACT

Trends in human resource management and the preparation/employment of psychologists are considered, along with the types of available data on training and employment. Because of Russia's Sputnik, the 1950s in the United States were characterized by an infusion of federal funds to college science and human service programs. During the 1970s, the financial and enrollment situation resulted in cutbacks in programs, college faculty positions, and funding of research. Three approaches have been used in resource management: (1) a massive data-based approach that used the best available data; (2) a focused data gathering approach by single professional groups such as educational or counseling psychologists, and (3) a speculative approach that used the best available judgments on what should occur 20 years in the future. Predicted future roles for counseling psychologists have included teaching about development, helping people interact with the environment, and being activists for the human services. A model for understanding employment and training patterns for the next 5 to 7 years is being developed, based on a study of the 100 largest research institutions and the 100 largest U.S. employers for counseling, developmental, educational, and school psychologists. A bibliography is appended. (SW)

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RESOURCE MANAGEMENT FOR THE 80'S

(Gloom and Doom in Academia or How to Live Underwater)

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Division E, Vice Presidential Address at the Annual Meeting of the American Educational Research Association, New York, March, 1982.

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RESOURCE MANAGEMENT FOR THE 80'S

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We are in deep trouble! Our resources are dwindling. Our faculty and students are getting frustrated. We must learn how to manage our resources better. We need to learn how to live under water. In my day, 16 years ago, students spent part of the spring quarter of their dissertation year visiting their multiple employment opportunities. 16 years ago, assistant and associate professors spent 2, maybe 3 years, at any one place before moving on for higher pay and a promotion. The "academic nomad was commonplace. Almost every doctoral student wanted to become successful, just like their major professor, a member of a prestigious graduate faculty. In the 80's, jobs are scarce. Promotions are slow. The nomads have settled... for years! Our doctoral students are encouraged to seek employment outside of academia (Vanden Bos, Stapp & Pallak, 1981; Stilwell, Note 2). Our fianacial, physical, and human resources are being spread very thinly. Somehow we have made a big mistake and it is our students, our programs, and ultimately the consumer who pays for it. Educators involved in the training of counseling, developmental, educational and school psychologists are faced with cricital decisions on how to manage their limited resources. Unfortunately, we in the academic community -- faculty, students and administrators -- have had limited

experience in coping with diminished resources (Stilwell & Stilwell, Note 3).

The raison d' etre for a discussion of resource management is that our higher education training systems have been so poorly organized that the present conditions give rise to self-destructive competition. In the long run we can conduct professional training programs for counseling, educational, developmental and school psychologists either in a haphazard or in an organized way. The haphazard way is characterized by a trail and error application of all management models to all programs. The systematic way eliminates all but the better methods, coordinates, synthesizes and reconciles alternatives in producing an optimum modus operandum (Stilwell, Note 4).

It is the purpose of this paper to develop a sense of our recent past, an appreciation for the present, and to extrapolate the data and forecast the future in the 80's. My belief is that psychologists in a variety of professional areas -- counseling, development, educational and school -- have a choice with profound consequences. They may choose to be reactive and allow haphazard, nonsystematic educational programming to increase pressures upon us. On the other hand, they may choose to be proactive and manage policy, program, and professional responses (Mazzoni & Mueller, 1980; Osipow, 1980; and Wilson & Rotter, 1982).

Recent History in Human Resource Management

In higher education and in the preparation of competent, skilled professional psychologists the recent history of

resource management follows a pattern which can be highlighted by key words: program and plant expansion, student unrest, financial restraint, and employability. Each of these key words can be used to signal a decade.

Sputnik

In the late 50's higher education benefitted from a national crisis: the Russians with Sputnik had demonstrated a scientific and technical superiority. As a result of this perceived national crisis, the federal government infused higher education with monies for physical plant and program expansion in both the scientific and the human service areas. Professionals at all degree training levels were produced to meet the needs for more scientists, more teachers, and more human service providers. Individuals, programs and institutions seemed to flourish in these good times.

Individual Liberties

In the 60's the rules for higher education human resource management shifted. The apathetic generation of the 50's was replaced by the activitist student generation of the 60's. No one in charge was ready for this change in student behavior. Indeed, the failures to communicate among students and their "parents" (in any setting) produced a tumultuous decade. Parents -- whether in government and academia or at home -- found it difficult and frustrating to deal with their children, now "partners". The sound and fury did signify the beginning of many benefits--lowered voting ages, civil rights laws, and an awareness of hunger and environmental abuse. In the mid 60's to

1970 the average number of new psychology doctorates was increasing each year at an inflationary rate -- an annual average percent of 14.6 (Stapp, Flucher, Nelson, Pallak & Wicherski, 1981). Somehow -- probably more haphazard than systematic -- professional training programs and the employment marketplace survived the decade. All was not well, however.

Hardtimes

In the 70's the events in resource management produced signs of a greater turbulance. Almost simultaneously, the financial base for higher education was rocked by three events: (1) the busted baby-boom dropped enrollments and the cash flow in higher education began to disappear; (2) legislators and administrators became sensitive to tax payer revolts and the need to deliver community services; and (3) the already sluggish economy was unable to shrug-off its numerous legislative, financial, and human stressors and its traditional tax bases disappeared. The consequences for higher education appeared to be as follows: (1) graduate students lost fellowship support and lost the opportunities to enroll in high demand programs (e.g., business and computer sciences), (2) faculty discovered an increased bureaucracy inhibiting funding and the conduct of research, and (3) administrators encountered the near impossibility of obtaining new monies for anything (e.g., 504 mandated-building rennovations, support for minority graduate students, and replacements for research equipment). In other words, institutions were obliged to deal with horizontal and with verticle cutbacks in people and programs. The 80's have

brought hardtimes to everyone, not just a few. Between 1970 and 1975, the number of new psychology doctorates began to slow down from an average annual increase of 15% for the previous five years to an average annual percentage increase of 7.9%. The average annual percent increase of new doctorates in psychology for the last half of the 70's declined further to 2.4%. None of these figures includes the doctorates in education who also claim identity with counseling, developmental and school psychology (Stapp et al., 1981). The complexity of theseinfluences was dishartening to students, faculty and administrators.

Frustration in Human Resource Management

The pattern for reacting to hardtimes follows the usual sequence of energy, frustration, discouragement, and burnout. As behaviorial scientists, we will want to be aware of our own place in this burnout pattern.

Early Predictions on Employment

As the 70's drew to a close an employment crisis began to emerge. Attempts had been made to forecast this gloomy crisis on the employability of graduating of psychologists--counseling, developmental, educational, and school. For example, in 1971, Cartter (1971) predicted a manpower glut by 1985, particularly for the employment of academic psychologists. Similarly, in 1972 a special issue of the American Psychologist demonstrated that the manpower supply and demand showed an over supply of academic psychologists (Little, 1972). A little later in 1975, Jones (Note 5) reported that for every seven graduates with

doctorates in counselor education, there was one faculty opening. The signals from various sources that we and our program graduates were facing a crisis of employment were, in retrospect, clearly visible. Many professional education program managers and their students appeared to be underprepared for job-seeking in hardtimes.

Discouragement

Constructive reactions to the pending over-supply of trained professionals have been hampered by five beliefs: (1) an academic skepticism over the data and its interpretation; (2) a belief that program reduction was the responsibility of the less adequate graduate programs; (3) a complementary belief that "our program" was superior and should not be cut-back; (4) a recognition that any adjustment to the supply and demand for selected professionals might be overcome by new supply and demand events; and (5) a delay in setting up regional or national planning consortia in response to the employment patterns. Often the choice taken by many departments was not to change enrollment patterns. If anything, the number of graduate students in psychology appears to have increased in the last ten years, in an era of documented loss of budgetary support (Viney & Suinn, 1981). We seem to be moving in the wrong direction. Rather than denying the presence of the crisis in professional training and employment, we need to look at the existing available data, create new, more systematic data collection models, and make some well-planned human resource-management decisions.

Contemporary Patterns in Human Resource Management

Throughout the last twenty years training and employment patterns have been studied in three different ways: (1) a massive data-based approach which uses the best available data from such diverse sources as APA, NRC, NCES, NSF and HERI with their related limitations, (2) a focused data gathering approach by single professional groups such as educational or counseling psychologists, and (3) a speculative, futuristic approach which uses the best available judgments on what should occur twenty years into the future. Each of these three data collection approaches have had limited effects upon the resource managers who are involved in training and in employing professional psychologists. These three approaches to resource management will be briefly discussed.

Massive Approaches

A variety of agencies have collected massive, broad-scale data sets on training and employment patterns among professional psychologists in general. For example, the National Research Council (NRC, 1967,1981) has been reporting on the number of doctoral recipients from U. S. universities for a number of years. Selected data patterns in the NRC reports suggested high production rates of certain doctorates by U.S. universities. In a similar effort the National Center for Education Statistics (NCES, 1980), which tries to collect data on doctoratal graduates in all scientific, behavioral science, and humanistic areas, reports annually on the aggregated totals within an area (e.g., education programs as an area graduated over 6,900

doctorates in 1980, psychology as an area graduated over 2,700 Ph.D.'s in the same year). These massive studies appear to have had a limited impact upon students and faculty in a given professional area, particularly for those training in psychology and in education. Typically, these broad-scale collections of doctoral graduation patterns suffer from statistical aggregation to such an extent that detailed analyses are impossible (Solomon, Kent, Ochsner & Hururcz, 1981; Stapp & Fulcher, 1981). For example, "data collected through the National Science Foundation are insufficiently detailed to provide anything but the broadest overview of psychological sciences" (Vanden Bos, Stapp & Pallak, 1981, p. 1208).

Focused Data Approaches

In contrast with the massive efforts for collecting aggregated training and employment data for all kinds of psychologists and/or for all kinds of doctorates in education, systematic and detailed data collections on psychologists of all kinds have been reported by Van den Bos, Stapp and Pallak (1981). In a special issue of the American Psychologist on human resource management, eight articles have been assembled on such relevant topics as employment patterns in the last half of the 70's, tenure status in psychology departments, women and minorities in psychology, and research activities. The combined effect of this special issue could be remarkable in its influence upon psychologist training and employment in the 80's. Indeed, the accumulated impact of the documented training and employment patterns is alarming and contributed to the gloom in

the academic community. Four potentially meaningful patterns emerge from these data:

1. employment opportunities continue to be gloomy in academia. The boom days of the mid-60's produced a large number of junior psychology professors. Now these individuals are tenured at very high rates, i.e., 97% for full professors and 89% for associate professors). The tenuring of faculty can produce concerns for administrators in that the youthful enthusiasm for research just might be tempered by time and rank (Stapp, 1981). Stilll, on the matter of aging, Stadtman (1980) reports that between 1969 and 1975 the percentage of faculty members over 50 years old increased slightly--from 24% to 29%, while the percentage of faculty members under 35 years old declined from 30 to 25%. Van West (1982) calls us the "graying professoriate". We are growing older, teaching and doing research longer, working in an era of diminished resources, and finding fewer job cpportunities for program graduates;

2. the professional work place is shifting from academia. Traditionally until the mid-70's about half of any years' psychology graduates found employment in academia. The next largest group, about a quarter of the graduates, practiced in human services settings. Government and some business settings employed about one-sixth of any year's graduates. A small percentage of psychology graduates took employment in school systems. More recently, in the later

70's, the employment patterns have shifted away from academia, down from 49% to 38% of the graduates. At the same time the percentage of graduates who began their career's in human service settings increased from 26% to 32%. The percentage of government/business psychologists increased from 15% to 21%. The percentage of new psychologists working in the schools remained stable (Stapp et al., 1981).

While the gross employment patterns show a decline in academia and a general increase in nonacademic settings, within subspecialties or professional identities different patterns seem to be emerging. For example, fewer counseling psychologists are needed in academia, but more are gaining employment in human services and in government/business. For another example, developmental psychologists continue to be needed at about the same rates in academia, school systems, and human services. Thirdly, educational psychologists seem to be holding their own in academia and in the government/business settings, while more are needed in school systems. Lastly, fewer school psychologists appear to be needed in academia and in school systems, but more are gaining employment in human services and in government/business settings (Stapp et al, 1981). The present patterns for selected psychology specialties suggest that training programs, especially for counseling and school psychologists, might encourage their students master a variety of nontraditional, alternative and

saleable skills which will make them more attractive to human services and government/business employers;

3. academic research productivity is being impaired. Two very different interdependent forces contribute to this unhappy situation. On the one hand, extramural funding has been disrupted in the last few years. Psychology as a science is dramatically dependent upon federal funding. Almost half of the total number of awards is from other than federal sources, but the nonfederal sources contribute only 21% of the total research dollars. Actually, about half of the local and state projects are funded by federal support. The private business sector provides only about 6% of the research support for psychology (Lowman & Stapp, 1981). On the other hand, the demand for internal funding has increased. Professors who are greatly involved in the conceptualization of funded research are being obliged to manage their productivity with lowered levels of graduate assistant and equipment support. Something is going to give. The situation is critical. Solomon and his associates show that "research productivity is unimpaired as long as faculty devote no more than 25% of their time to other activities" (Solomon et al, 1980, p. 288). In this chicken and egg situation research productivity and the human fabric of academia cannot survive without appropriate, careful resource management; and,

4. female and minority researchers are making progress,

slowly. Small advances have been made in the graduate training and subsequent employment of women and minority researchers. For example, Thomas (Note 7) has studied the perceptions of power and how females and minority researchers might become more successful in the research enterprise. The percentage of women graduates continues to rise and appears to be approaching 50% in counseling, educational and school psychology. Slightly over 50% of the graduating and presently employed developmental psychologists are women. The movement toward equal representation by gender means, in absolute numbers, that the number of women receiving doctorates is on the increase (Solomon et al, 1981). At the same time minority psychologists are making similar progress. The percentage of employed minority psychologists in various domains continues to be low--ranging between 2.6% in developmental and 4.0% in educational psychology. These low percentages will rise slowly. In 1980 about 10% of the graduating counseling, developmental, educational and school psychologists represented minorities (Russo, Olmedo, Stapp & Fulcher, 1981). In AERA about 10% of the membership is represented by minorities.

Thus, program managers and potential employers must deal with declining job opportunities, a shift in the workplace from academia, impaired financial support for research productivity in government/business, and more minority research psychologists. The overall impact of these four emerging

patterns can become useful to program managers in their development of an appreciation for the supply and demand in counseling, developmental, educational and school psychology.

Still, focused, detailed data collections on the training and employment patterns for counseling, developmental, educational and school psychology have been infrequently conducted by individuals, and by appropriate professional groups or agencies. Even less frequently these reports have been disseminated to the appropriate students, faculty or administrators in the academic community. A series of studies undertaken by Banikiotes (1975, 1977, 1980) and continued by Davis (Note 6) on the training and employment patterns of counseling psychologists is exemplary. This data collection program which is jointly sponsored by the Council on Counseling Psychology Training Programs and Division 17 of APA results in a fairly detailed report on such domains as numbers of doctoral applicants (fairly stable at about 10 applicants for each acceptance), internship sites (gradually declining at counseling centers and schools and increasing at state hospitals), employment placements (declining in academia and increasing in private practice) and curriculum (strong in practicum and research methods and weak in individual differences, rehabilitation and gerontology). Thusfar, the counseling psychology survey has not begun to collect data on "business/corporate" employment patterns. Presently, with the exception of counseling psychology, students and faculty in developmental, educational and school psychology, and potential

employers have been obliged to make training and employment decisions in a nearly data-free environment. These psychologists with unique professional identities might be well-advised to adapt the systematic, detailed data collection model used by counseling psychologists (Banikiotes, 1975, 1977, 1980; Davis, Note 6) in the development of their own supply and demand data banks.

Some preliminary work on the training and/or employment of developmental and educational psychologists has been reported by individuals. In contrast with the counseling psychology series, these preliminary efforts lack the imprimatur of a professional group. For example in developmental psychology, Strauss and Johnson (1982) describe their frustration in trying to communicate with other professionals, nondevelopmental psychologist and outside of academia. They found the jargon of special education to be unique (e.g., LBD, TMR, "time out" rooms) and often difficult to comprehend. Indeed, in the course of providing "expert testimony" they discovered that judges and lawyers cannot tolerate statements couched in research probabilities! As a result of their various experience, Strauss and Johnson recommend an expanded developmental psychology curriculum to include multi-discipline coursework with other helping professionals, e.g., special educators, social workers and lawyers. For another example of an individual trying to make a unique contribution to a professional training curriculum, Cole (1978) explored the training and employment patterns with a small sample of educational psychologists and

found that in the last half of the 70's a large number of educational psychologists were employed in dental and medical schools as educational researchers (e.g., Smith, Rovin & Haley, 1973) and that other educational psychologists were finding employment in colleges of allied health (e.g., Pfeifle, Lacefield & Cole, 1981). The work of Cole and his colleagues is setting the stage for a part of the solution to the challenge of human resource management in educational psychology. My theme is that each professional group can benefit from a careful analysis of theirtraining and educational patterns of the past and present.

Speculative approaches

Speculations on future patterns of employment seem to be based upon a benefit from the collective "best judgment". Counseling, educational and school psychology have written essays or have had conferences to plan they future. Whether these speculations will have an impact remains to be seen. In a meaningful undertaking, Whiteley (1980) prepared the major contribution on counseling psychology in the year 2000 A.D.. The broad spectrum of reactors (e.g., Bordin, Magoon, Wrenn, Pepinsky, Ivey, Thoresen, and Krumboltz) presented unique, often conflicting forcasts for the future of counseling psychologists. Three common themes did emerge from this dialogue:

1. counseling psychologists will become experts, facilitators, or teachers for the life-long developmental process. The myriad of changes suggested by this theme include developing preventive

counseling curricula for dissemination to the public, whole family counseling interventions, and geriatric counseling programs. A consequence from this recommendation is that curricular innovations will call upon the expertise of developmental and educational psychologists (Danish, 1980; Ivey, 1980);

2. counseling psychologists will become environmental assessors environmental managers, and environmental evaluators in their helping persons interact with their respective environemnts. The myriad of changes suggested by this theme include designing curricular packages to develop awareness of individual and cultural differences, mata-theories which will direct students to the long standing puzzle, "which counseling strategy is better for this particular individual (or group) with this unique objective and under these circumstances?", and designing models for computer supported evaluation and counseling process outcome data integration. Again, a consequence of this theme is the integration of several professionals for a common training program (Osipow, 1980; Krumboltz & Menefee, 1980); and,

3. counseling psychologists will become activitists for human services. In a real sense the present crisis in human resource management has required training programs to integrate multidiscipline faculties and student bodies from which is evolving

the health psychology movement (Ivey, 1980; Osipow, 1980).

Throughout the discussion of future roles for counseling psychologists, the effort was made to emphasize new skills and attitudes. Unfortunately little mention was made of the rapidly growing private-for-profit human service industry, e.g., Community Psychiatry, Inc., Comprehensive Care, Inc., and Excepticon. Similarly almost no mention was made of the gradually increasing employment opportunities in government and in business/industry settings. Indeed, a frustration among developmental and educational psychologists can rise over issues about their professional future: the kinds of debate/dialogue existant in counseling and in school psychology needs to be tried in other helping professions.

Future Patterns for Resource Management

In the previous sections of this paper an attempt has been made to discuss the kinds and quality of data on training and employment, to highlight the major trends in employment, and to synthesize some suggestions for the future.

During this year I have started to build a model for understanding employment, and possible training patterns, for the immediate future, i.e., the next five to seven years. It is impossible to examine all of the academic marketplace and for the present, Teresa Newsome and I have decided to study the 100 largest research institutions in an effort to understand their level of doctoral training productivity and their employment requirements. In addition, we have begun to assess the

employment needs of the 100 largest U.S. employers for counseling, developmental, educational and school psychologists. Our rationale is we want to start somewhere in learning how many Ph.D.'s will "industry" need over the next five years. As we get experienced with collecting data on employment needs, we will expand our employment groups to include human service settings and specific industrial groups.

At the same time we are gathering the employment demand data, we are trying to gather information on how academia and industry are bridging the communications (and their employment) gap. The AERA SIG on Business and Industry has made great strides toward closing this gap. Our questionnaire checklist of possible communications activities contains four groups of items: (1) how much coursework is offered on-site in government and in business/industry? We believe that getting our faculty (missionaries?) into the government and business/industry buildings will result in greater opportunities for communications; (2) how often are business/industry leaders visiting psychology departments and colleges of education as volunteer faculty? We believe that once the potential employers visit "our turf", the positive contacts with students will increase the employment opportunities; (3) how often are practicum/internship sites being established in business/industry and in government settings? We recognize that adequate site supervision requires the prior presence of a professional and we are using these questions to raise the awareness of potential employers; and (4) how often do academic

and business/industry or government employers "swap" faculty and managers for sabbatical years? We believe it is necessary to establish patterns of long range and sustained professional interaction. In other words, we are trying to stimulate and examine the academic and business/industry coping strategies for the present "mismatch" between doctoral training and doctoral employment. We believe that training for generalization to new, nonacademic settings will be crucial to the success of our programs.

> In Leo Rosten's (1961) novel about World War II, Captain Newman, M.D. , the young lieutenant asked his chief psychiatrist how he coped with life and stress in a military hospital. In part, the Captain's answer was, "Suppose a great leader learned that a tidal wave was coming in three days to cover his country. He would have three choices: (1) he could gather all the beautiful people and have a bacchanalia; (2) he could gather all the wise people and study the Great Books; or (3) he could learn how to live under water!"

Presently in counseling, developmental, educational and school psychology, we have the same kind of tidal wavecrisis. It is time for us to cope with shifts in employment patterns, with new expectations for our program graduates, and with suggestions (verily mandates') for revisions in our professional training programs. The assembled data on training and on employment patterns can be useful to project the future. In the meantime, while the supply and demand models are being fitted to

our professional groups, I am trying to find ways to teach our students and to help our colleagues learn how to live under water.

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